

<110>	Yu,				·				
	Araka	awa, Takesh:	i						
<120>	Trai	Transgenic Plant-Based Vaccines							
<130>	122	73-3							
<140> <141>		to be assigned 2001-01-29							
<160>	15								
<170>	PatentIn version 3.0								
<pre>\$210></pre> \$211> \$212>	1 376 DNA				·				
213> Vibrio cholerae									
400>	1								
atgatt	aaat	taaaatttgg	tgttttttt.	acagttttac	tatcttcagc	atatgcacat	60		
्र चुिgaaca भ	acctc	aaaatattac	tgatttgtgt	gcagaatacc	acaacacaca	aatacatacg	120		
etaaat	gata	agatattgtc	gtatacagaa	tctctagctg	gaaacagaga	gatggctatc	180		
attact	ttta	agaatggtgc	aacttttcaa	gtagaagtac	caggtagtca	acatatagat	240		
tcacaa	aaaa	aagcgattga	aaggatgaag	gataccctga	ggattgcata	tcttactgaa	300		
gctaaa	gtcg	aaaagttatg	tgtatggaat	aataaaacgc	ctcatgcgat	tgccgcaatt	360		
agtato	gcaa	attggc	·				376		

<210> 2

<211> 36

<212> DNA

<213> primer

<400> gctcta	2 gagc	caccatgatt	aaattaaaat	ttggtg			36
<210><211><212><213>	3 41 DNA prim	mer				•	
<400> ctggage	3 ctcg	ggccccggcc	catttgccat	actaattgcg	g		41
<210><211><212><213>	4 391 DNA Vibi	rio cholerae	e plus artii	ficial seque	ence :	ı	
다 - 400>	4	taaaatttgg				atatgcacat	. 60
्य ggaacad	cctc	aaaatattac	tgatttgtgt	gcagaatacc	acaacacaca	aatacatacg	120
u Ctaaat	gata	agatattgtc	gtatacagaa	tetetagetg	gaaacagaga	gatggctatc	180
attact(ttta	agaatggtgc	aacttttcaa	gtagaagtac	caggtagtca	acatatagat	240
F Mcacaaa A	aaaa	aagcgattga	aaggatgaag	gataccctga	ggattgcata	tcttactgaa	300
gctaaa∢ ⊨⊧	gtcg	aaaagttatg	tgtatggaat	aataaaacgc	ctcatgcgat	tgccgcaatt	360
agtatg	gcaa	attggcccag	gcccgggata	a			391
<210><211><211><212><213>	5 54 DNA Vibr	rio cholerae					·
<400>	5 aaga	taatatttgt	gttttttatt	ttcttatcat	cattttcata	tgca	54

Sequence Listing.ST25

```
<210>
        6
<211>
        24
<212>
        DNA
<213>
        primer
<400>
        6
                                                                              24
accaatacat tacactagca tctg
<210>
        7
<211>
        27
<212>
        DNA
<213>
        primer
<400>
       7
                                                                              27
gactgagtgc gatattatgt gtaatac
210>
        8
<211>
        66
        DNA
        Rotavirus sp.
្រុ∤
ភ្វ¥00>
gataggttga ctactagaga aattgaacaa gttgaattgt tgaagagaat ttacgataag
                                                                              60
Htgact
                                                                              66
ű
<u>[</u>]
__210>
<211>
        60
<212>
        DNA
<213>
        primer
<400>
gccgagctcg ataagttgac tactagggag attgagcaag ttgagttgtt gaagaggatt
                                                                              60
<210>
        10
<211>
        60
<212>
       DNA
<213>
       primer
```

<400> 10 gccgagctca	caactcatcc	ttctcagaag	tcaacttatc	gtaaatcctc	ttcaacaact	60
<210> 11 <211> 488 <212> DNA <213> Vib	rio cholera	e and Rotay:	irus sp.			
<400> 11						
atgattaaat	taaaatttgg	tgttttttt	acagttttac	tatcttcagc	atatgcacat	60
ggaacacctc	aaaatattac	tgatttgtgt	gcagaatacc	acaacacaca	aatacatacg	120
ctaaatgata	agatattgtc	gtatacagaa	tctctagctg	gaaacagaga	gatggctatc	180
	agaatggtgc	aacttttcaa	gtagaagtac	caggtagtca	acatatagat	240
Cacaaaaaa Ucacaaaaaa	aagcgattga	aaggatgaag	gataccctga	ggattgcata	tcttactgaa	300
gctaaagtcg	aaaagttatg	tgtatggaat	aataaaacgc	ctcatgcgat	tgccgcaatt	360
ال إعgtatggcaa	attggcccag	gcccgggaga	gctcgataag	ttgactacta	gggagattga	420
<pre>01</pre>	ttgttgaaga	ggatttacga	taagttgact	tctgagaagg	atgagttgtg	480
H Hagctctaa M			-			488
<pre>210> 12 <211> 444 <212> DNA <213> Esc</pre>	herichia col	L i	·			
<400> 12						
gtagagaaaa	atattactgt	aacagctagt	gttgatcctg	taattgatct	tttgcaagct	60
gatggcaatg	ctctgccatc	agctgtaaag	ttagcttatt	ctcccgcatc	aaaaactttt	120
gaaagttaca	gagtaatgac	tcaagttcat	acaaacgatg	caactaaaaa	agtaattgtt	180
aaacttgctg	atacaccaca	gcttacagat	gttctgaatt	caactgttca	aatgcctatc	240

Sequence Listing.ST25

agtgtg	tcat	ggggaggaca	agtattatct	tctacaacag	ccaaagaatt	tgaagctgct	300
gctttg	ggat	attctgcatc	cggtgtaaat	ggcgtatcat	cttctcaaga	gttagtaatt	360
agcgct	gcac	ctaaaactgc	cggtaccgcc	ccaactgcag	gaaactattc	aggagtagta	420
tctctt	gtaa	tgactttggg	atcc				444
<210>	13						
<211>	141						
<212>		•					
		cio cholerae	2				
<213>		TIO CHOIELAG					
<400>	13						
atcagt	aata	cttgcgatga	aaaaacccaa	agtctaggtg	taaaattcct	tgacgaatac	60
ēaatct. ∰	aaag	ttaaaagaca	aatattttca	ggctatcaat	ctgatattga	tacacataat	120
اً! .agaatta	aaaq	atgagttgtg	а				141
7.5	auug	acgagaagag	~				
1-1	•						
U1							
<210>	14						
2 211>	54						
≈ 212>	DNA			•			
₹213> ₩	Vib	cio cholerae					
1400>	14						
ātggta L	aaga	taatatttgt	gtttttatt	ttcttatcat	cattttcata	tgca	54
<210>	15						
<211>	651						
<212>	DNA						
<213>	Vib	cio cholerae	e and Escher	richia coli			
<400>	15					•	
atggta	aaga	taatatttgt	gttttttatt	ttcttatcat	cattttcata	tgcagtcgac	60
gtagag	aaaa	atattactgt	aacagctagt	gttgatcctg	taattgatct	tttgcaagct	120
gatggc	aatg	ctctgccatc	agctgtaaag	ttagcttatt	ctcccgcatc	aaaaactttt	180



gaaagttaca	gagtaatgac	tcaagttcat	acaaacgatg	caactaaaaa	agtaattgtt	240
aaacttgctg	atacaccaca	gcttacagat	gttctgaatt	caactgttca	aatgcctatc	300
agtgtgtcat	ggggaggaca	agtattatct	tctacaacag	ccaaagaatt	tgaagctgct	360
gctttgggat	attctgcatc	cggtgtaaat	ggcgtatcat	cttctcaaga	gttagtaatt	420
agcgctgcac	ctaaaactgc	cggtaccgcc	ccaactgcag	gaaactattc	aggagtagta	480
tctcttgtaa	tgactttggg	atccgtcgac	atcagtaata	cttgcgatga	aaaaacccaa	540
agtctaggtg	taaaattcct	tgacgaatac	caatctaaag	ttaaaagaca	aatattttca	600
ggctatcaat	ctgatattga	tacacataat	agaattaaag	atgagttgtg	a	651